

# SOUTHERN FOREST PEST REPORTER

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UNITED STATES  
DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
STATE AND PRIVATE FORESTRY  
SOUTHEASTERN AREA  
DIVISION OF FOREST INSECT  
AND DISEASE CONTROL

ZONE OFFICES  
ASHEVILLE N.C.  
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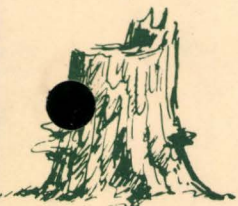
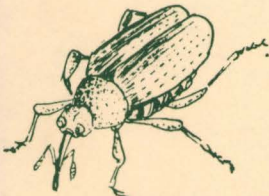
Number 1

50 SEVENTH ST. N.E. ATLANTA, GEORGIA 30323 February 1968



## SUMMARY OF CONDITIONS

- ... "Overwintering southern pine beetle populations are continuing at a high level in most outbreak areas throughout the Southeastern Area. New outbreaks are reported from Georgia, Louisiana, Tennessee, and South Carolina. A significant increase in losses is expected during 1968.
- ... A fusiform rust survey revealed heavy infection of several slash pine plantations in east Texas.
- ... Conditions are favorable for ips engraver beetle buildup following ice damage to scattered pine stands in Georgia, North Carolina and South Carolina.
- ... Annosus root rot was found in 12 of 18 loblolly pine plantations examined in southern Arkansas.
- ... The level of seedworm infestation in longleaf pine cones in a South Carolina seed production area decreased substantially from 1966 levels.
- ... Extensive infestations of the small southern pine engraver beetle have developed in drought stricken areas of Alabama, Arkansas, Florida, Georgia, Louisiana, and Mississippi.



## STATUS OF FOREST INSECTS

### SOUTHERN PINE BEETLE, Dendroctonus frontalis Zimm.

ALABAMA      Infestations of the southern pine beetle on the Bankhead National Forest increased to a high level in the fall of 1967. The beetle population has continued at a much higher level this winter than has been experienced since 1960. Removal and chemical control measures along with a winter ground surveillance program are being continued by Forest personnel. An appraisal survey is scheduled for the spring to determine the status of the beetle populations.

Infestations are continuing at a moderate level on all four Districts of the Talladega National Forest. Removal and chemical control measures are being continued.

During November 1967, two southern pine beetle infestations were found on the Tuskegee National Forest. One infestation which contained approximately 40 trees had 12 slash pine, Pinus elliottii Englm. infested with southern pine beetle. Nine of the 12 were infected with fusiform rust, Cronartium fusiforme (A & K) Hedgc. & Hunt. The other three were healthy. Removal of the infested trees was used as a control.

Activity increased on private land in Jefferson, Walker, Blount, Shelby, Clarke and St. Clair Counties last fall. Beetle activity has continued at a moderately high level during the winter months. Salvage and/or direct control measures are being employed by some landowners.

GEORGIA      Infestations on the Tallulah and Chattooga Ranger Districts of the Chattahoochee National Forest are reported to be increasing. No control is being employed. An appraisal survey is scheduled for this spring.

Beetle activity on the Uncle Remus Ranger District and Hitchiti Experimental Forest of the Oconee National Forest is continuing at a low level. Salvage and Direct control measures are being performed only on the Experimental Forest.

A survey of southern pine beetle infestations on a four-county area, Elbert, Madison, Franklin and Hart, conducted by the Georgia Forestry Commission, revealed that there were an estimated 31 infested trees per thousand acres. The amount of private land surveyed was 199,600 acres.

## SOUTHERN PINE BEETLE (Cont'd)

### LOUISIANA

A severe outbreak of the southern pine beetle was detected in east-central Louisiana during mid-October. This outbreak encompasses some 400 M acres in LaSalle, Catahoula, Caldwell, and Grant Parishes. (Fig. 1). The current level of infestation is estimated at 74.2 actively infested trees per M acres of host type. Approximately 24,000 trees are infested. An aggressive control program utilizing commercial sales and chemical control operations is underway to minimize losses.

A localized infestation comprising roughly 25 acres of loblolly pine was detected in the Calcasieu River Basin in the southern part of Rapides Parish.

Southern pine beetle infestations are increasing in Allen Parish. A recently completed survey revealed a level of 24.6 actively infested trees per M acres host type. The area of infestation has spread to the South and East and now comprises an area of roughly 360,000 acres.

Infestations have collapsed in Calcasieu Parish in southwestern Louisiana. Only six single tree spots were detected during the course of a recently completed aerial survey. No actively infested trees were found.

Southern pine beetle activity has declined to a low level in portions of five Parishes in southeastern Louisiana. An estimated 1.70 trees per M acres host type are currently infested with the beetle.

### MISSISSIPPI

Southern pine beetle infestations have increased slightly on the Homochitto National Forest to a level of 2.41 infested trees per M acres host type. The southern pine beetle is behaving as a secondary invader in many spots infesting trees initially killed by ips engraver beetles.

Infestations are continuing at relatively low levels on private lands in Amite and Wilkinson Counties south of the Homochitto National Forest. The current level of infestation is 2.53 infested trees per M acres host type. Brood densities in infested trees are relatively low, averaging 123 insects per square foot of bark surface. A total of 2,673 infested trees have been chemically treated by Mississippi Forestry Commission control crews since July 1967.

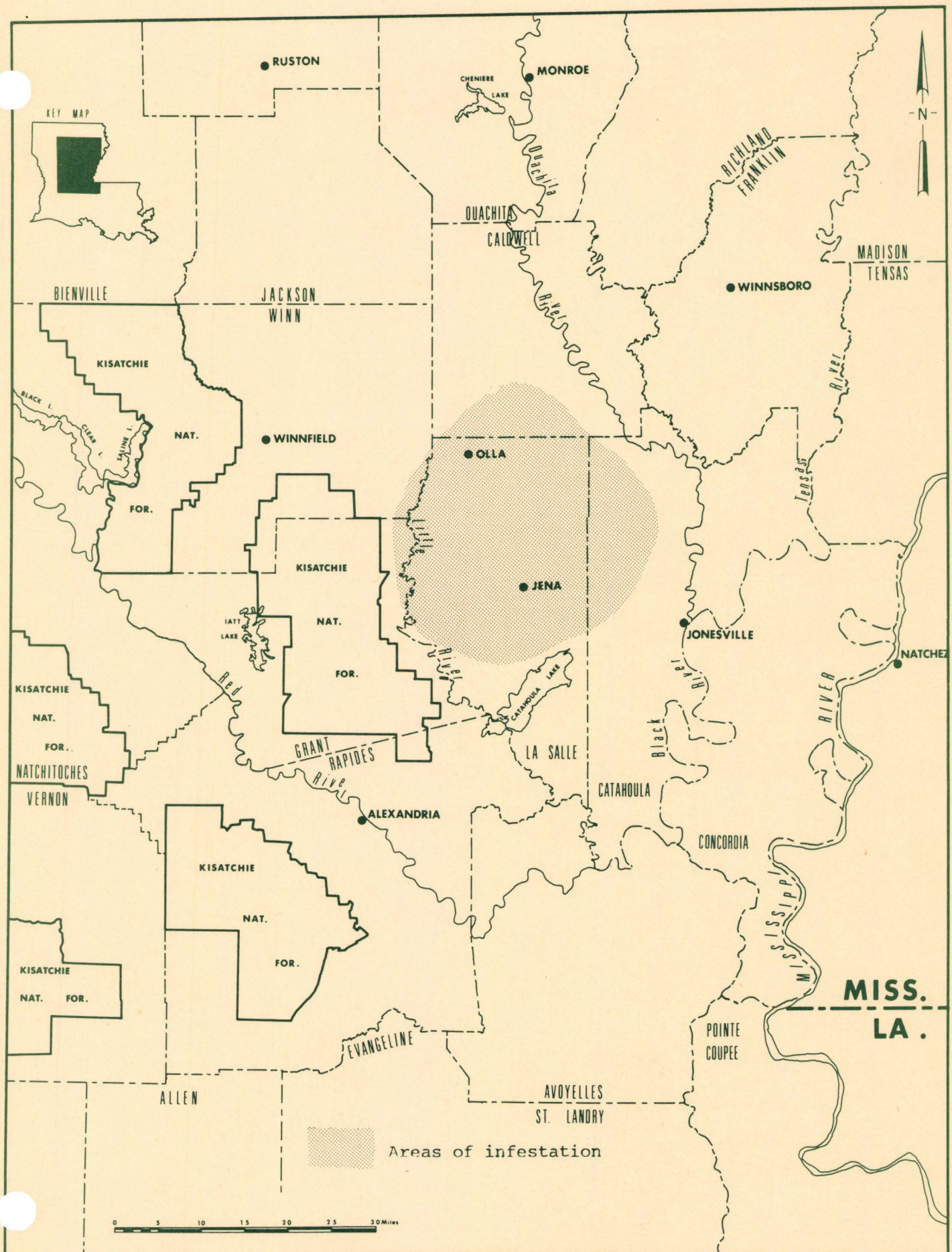


Fig. 1 Southern Pine Beetle Infestation in Central Louisiana

## SOUTHERN PINE BEETLE (Cont'd)

Light infestations of the southern pine beetle were detected along the Natchez Trace Parkway from Washington, Mississippi to the southern portion of Hinds County.

### SOUTH CAROLINA

Southern pine beetle activity on the Andrew Pickens District of the Sumter National Forest has increased from a level of 1.7 infested trees per M acres in August, 1967 to 13.1 during January 1968. Salvage and chemical control operations are in progress.

### TENNESSEE

An outbreak of the southern pine beetle has developed in the Cades Cove area of the Great Smoky Mountains National Park. This is the first beetle population buildup there since 1958. An aerial photographic survey of the area is scheduled for February 1968.

### TEXAS

Southern pine beetle activity is at a relatively low level over a 4.5 Million acre outbreak area on private lands in east Texas. A recently completed survey revealed an infestation level of 5.11 infested trees per M acres host type with most of the spots occurring in the vicinity of Jasper. Over 48,000 trees have been treated since July 1967 by the Texas Forest Service and private industry (Texas Forest Service).

Infestations are continuing at low levels on the Yellow Pine, Angelina and Big Thicket Districts of the National Forests in Texas. Southern pine beetle activity was reported for the first time from the Tenaha District.

## WESTERN PINE BEETLE, Dendroctonus brevicomis LeC.

### TEXAS

A localized infestation of the western pine beetle was detected in the Ponderosa pine forests of the Davis Mountains in western Texas.

## BLACK TURPENTINE BEETLE, Dendroctonus terebrans (Oliv.)

### ALABAMA

The turpentine beetle is continuing to cause damage to or loss of valuable residual pine trees in recently logged areas throughout the Bankhead National Forest. Chemical control methods are being used.

## BLACK TURPENTINE BEETLE, (Cont'd)

On the Talladega National Forest, the turpentine beetle continues to be a problem in recently logged, stumped, or other disturbed stands. Chemical control methods are being used.

GEORGIA The beetle is continuing to cause an unusual amount of damage in the naval stores belt of the Coastal Plain.

FLORIDA On the Seminole District of the Ocala National Forest, the turpentine beetle is causing considerable damage to residual trees in areas where logging has occurred.

Turpentine beetle activity has also increased slightly on the Osceola National Forest.

LOUISIANA The black turpentine beetle continues to infest stumps and residual trees injured by logging in recently disturbed stands on the Kisatchie National Forest. Major problem areas are low, poorly drained sites on the Winn and Catahoula Districts. Approximately 22,000 trees have been chemically treated on the forest since July 1967. Black turpentine beetle infestations are also occurring on low, wet sites following stand disturbances in Allen Parish.

MISSISSIPPI Chemical control activity is continuing on the Homochitto, DeSoto, Bienville and Tombigbee National Forests to suppress black turpentine beetle infestations following stand disturbance.

## IPS ENGRAVER BEETLES, Ips spp.

ARKANSAS The small southern pine engraver, Ips avulsus (Eichh.) killed groups of young loblolly pines in plantations in Calhoun, Cleveland, Dallas and Union Counties in southern Arkansas. One infestation on paper company lands in Cleveland County covered five acres.

ALABAMA Ips infestations are still prevalent in areas not receiving adequate  
FLORIDA rainfall. Activity has also increased where associated with southern  
GEORGIA pine beetle infestations in Alabama and Georgia.

On the Ocala National Forest, Ips spp. populations are higher than they have been in the past 5 years and are causing extensive damage to drought stricken sand pine, Pinus clausa (Chapm.) Vasey stands throughout the Forest.

## IPS ENGRAVER BEETLES, (Cont'd)

GEORGIA NORTH & SOUTH CAROLINA A severe ice storm caused damage to pine stands in the Piedmont Region of Georgia, North Carolina and South Carolina on January 10-12, 1968 (Fig. 2). A buildup of ips engraver beetle populations in the ice damaged timber may result.

LOUISIANA Extensive infestations of I. avulsus, occurred over much of the pine growing region of Louisiana during October following an extended dry period. Severe infestations occurred in young pine plantations along the Calcasieu River in Vernon and Rapides Parishes and in LaSalle and Catahoula Parishes, where it was closely associated with the southern pine beetle. Frequently, I. avulsus was the primary invader with the southern pine beetle behaving as a secondary insect.

MISSISSIPPI Infestations of I. avulsus, with the southern pine beetle as a secondary invader, occurred in small groups of young pines over a 15 square mile area northwest of Centreville in Wilkinson County, Mississippi.

Extensive infestations of I. avulsus were reported from private lands in Union County by Yazoo-Little Tallahatchie project personnel.

Scattered infestations of I. avulsus, up to 30 trees in size, were detected along the southern portion of the Natchez Trace Parkway.

## SEED AND CONE INSECTS

ARKANSAS A three year pilot project, designed to control seed and cone insects in two shortleaf pine seed production areas on the Piney District of the Ozark-St. Francis National Forest has been completed. Preliminary results indicate that the incidence of insect infestation was low and there was little or no difference between treated and untreated areas.

SOUTH CAROLINA An evaluation of Laspeyresia sp. seedworm populations in longleaf pine cones on the Brick Church Seed Production area revealed a substantial decrease from 1966 levels in percent of total cones infested and seed loss.

Populations of Laspeyresia sp. seedworms in loblolly pine cones on a seed orchard on the Edgefield District of the Sumter National Forest continue to occur at the same low levels of 1966.

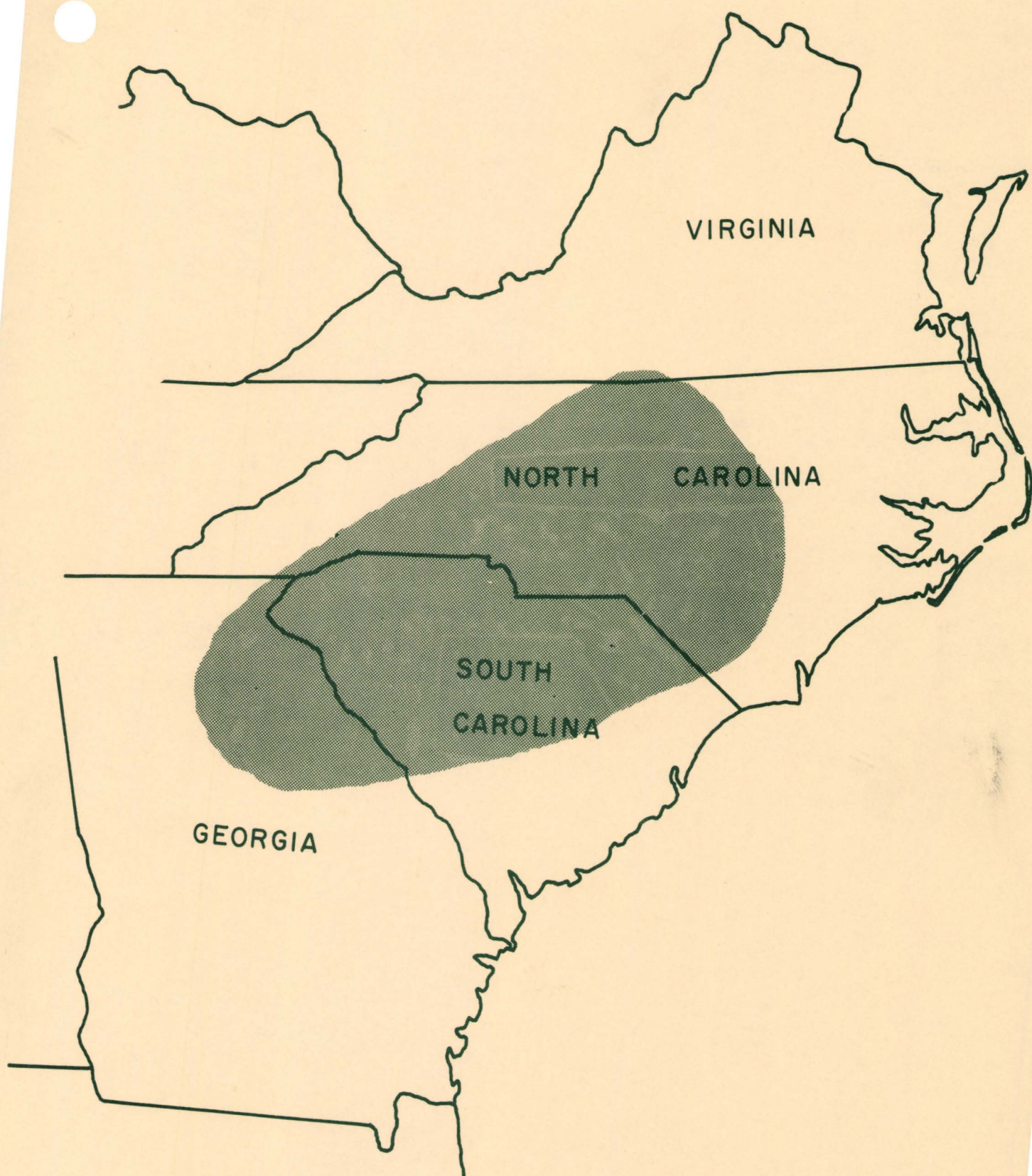


FIG. 2 - ICE STORM DAMAGE

JANUARY 10-12, 1968

BALSAM WOOLLY APHID, Chermes piceae (Ratz. )

NORTH CAROLINA Surveys to detect balsam woolly aphid infestations in the 60,000 acres of host fir type in the Southern Appalachians were continued during 1967. Spring and Fall aerial-ground surveys in conjunction with trapping procedures to detect immature motile nymphs and eggs revealed a reduced rate of infestation spread as compared with the data of previous years. Only one new infestation was detected this year on Grandfather Mountain in North Carolina. Observations to detect natural mortality of the balsam woolly aphid life stages were made in the fall to provide a clue to the decreased rate of spread. Although a measurable degree of mortality did occur, its long range impact and significance is presently unknown.

PINE SAWFLIES, Neodiprion spp.

FLORIDA A localized outbreak of the red-headed pine sawfly, Neodiprion lecontei (Fitch) has occurred on the Seminole Ranger District, Ocala National Forest. The larvae have been observed on longleaf pine, Pinus palustris Mill. trees from 6 to 50 feet tall. No control is being employed.

FALL WEBWORM, Hyphantria cunea (Drury)

MISSISSIPPI Moderate to heavy defoliation of persimmon, hickory and sweetgum by fall webworm occurred along the Natchez Trace Parkway in northern Mississippi.

OKLAHOMA Light defoliation of persimmon and other hardwoods occurred on the Platt National Park and Arbuckle Recreation Area in south Central Oklahoma.

MISCELLANEOUS INSECTS

OKLAHOMA A survey designed to predict the potential for defoliation by eastern tent caterpillar, Malacosma americanum (F.) on Chickasaw plumb in the Platt National Park indicated that negligible damage may be expected in 1968.

Light "shothole" type damage by the elm leaf beetle, Galerucella xanthomelaena (Schr.) occurred on American elm in the Platt National Park.

## STATUS OF FOREST DISEASES

### ANNOSUS ROOT ROT, Fomes annosus (Fr.) Cke.

ARKANSAS Examination of eighteen loblolly pine plantations in four counties of south central Arkansas revealed Fomes annosus infection in 12 of the plantations. Three of the most severely infected areas have been repeatedly thinned over the last ten years. As additional thinnings are made in such plantations, annosus root rot will undoubtedly become a major disease problem in this area.

### NEEDLE CAST, Hypoderma lethale Dearn

ALABAMA Needle cast is prevalent in all three states and is especially heavy  
FLORIDA on slash pine in south Georgia and on slash and pond pine in Florida  
GEORGIA

MISSISSIPPI The characteristic red brown discoloration of pine needles caused by the needle cast fungus H. lethale is again prevalent throughout central Mississippi. Loblolly and shortleaf pine are the most common hosts in this area.

### SOUTHERN FUSIFORM RUST, Cronartium fusiforme (A & K) Hedgc. & Hunt

GEORGIA According to Dr. S. J. Rowan, Southeastern Forest Experiment Station, Macon, Georgia, the first accurate rust infection appraisal for all Georgia nurseries showed that an average of 1.1 percent infection existed in 1967 even though the pine seedlings were treated with Ferbam. Twenty-four thousand seedlings were examined. It has been previously reputed that an average of 0.1 percent of all treated nursery seedlings have fusiform rust infection during an average year.

TEXAS Tree counts in slash pine plantations located in Jasper and Nacogdoches Counties, revealed main stem infection of over 45 percent C. fusiforme. Fusiform rust has caused little concern in east Texas, but if many highly infected stands exist, greater care should be taken in thinning and management operations. (Texas Forest Service)

More detailed information can be obtained by writing to the Forest Pest Control Division Field Offices listed below or to the Atlanta Office:

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